

REMARKS

Claims 1-20 are pending. By this Amendment, claim 1 is amended.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Le in the March 19, 2004 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

In paragraph 5, on page 3 of the Office Action, claims 1-6 and 11-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Blanchet, U.S. Patent No. 5,453,649, in view of Hofmann, U.S. Patent No. 5,086,243. The rejection is respectfully traversed.

Applicants' invention of claim 1 calls for a motor with a rotation detecting device, comprising a rotary shaft; a yoke in a bottom cylindrical shape which rotatably supports one end of the rotary shaft and attaches permanent magnets on its inner peripheral surface; a casing with a bottomed cylindrical part which is connected to the open end of the yoke and rotatably contains the other end of said rotary shaft; and a rotation detecting device which detects rotation of said rotary shaft, wherein the rotation detecting device is supported by a sensor holder, the sensor holder is provided with an outer electrical connecting portion and is disposed in the casing by insertion into a sensor holder receiving part formed in the casing from the same direction as an incorporating direction of the rotary shaft into the bottom cylindrical part, and the casing is provided with an electrical connecting opening part from and right under which the outer electrical connecting portion of the sensor holder which has been inserted into the sensor holder receiving part is seen and which is positioned orthogonal to the insertion direction of the sensor holder, whereby an electrical connection for the sensor holder is made from the electrical connecting opening part. Neither Blanchet nor Hofmann nor their combination disclose such a device.

Firstly, Hofmann is only cited for disclosing permanent magnets within a yoke's inner peripheral surface. Blanchet is relied on for providing all the other features of the claimed invention and Blanchet does not do so.

Blanchet discloses a rotor 20 received in a motor housing 16. The motor housing 16 corresponds to Applicants' claimed yoke. Mounted over an output shaft 22, with shank 24 and worms 26A, 26B extending therefrom, is an electrical connection module 12. The electrical connection module 12 is mounted into the yoke via holes 64 receiving guide pins 19 formed in the motor housing 16 (col. 3, lines 60-65). At that time, a housing 14, which corresponds to Applicants' casing, is mounted to the motor housing 16, using screws 46 between the motor housing 16 and the end plate 42. The shank 24 and worms 26A, 26B extend through a hole 49 so that the worms 26A, 26B, apparently, engage with pinions 29 to, in turn, engage a driven wheel 32 having contacts on an upper face 33. The actual structure of this engagement is not shown with respect to the first embodiment of Figs. 1-7 and appears to differ from the second embodiment shown in Fig. 8.

Thus, in Blanchet there is no disclosure of rotatable support of the rotary shaft in the yoke or motor housing 16 as the mounting and support is provided by pins 19 engaging holes 64.

Next, Blanchet shows a sensor body 74 extending from a bottom of an electrical connection module 12 in the first embodiment, and in the second embodiment a second part 74' that is mounted to a first part 74 extending from the electrical connection module 12. In the first embodiment, the sensor body 74 is inserted through an aperture 52, that extends through the end plate 42 and connector part 40, so that conductive electrical blades 76 contact the upper surface, or the face, 33 of the driven wheel 32. In the second embodiment a recess is provided in the cover 36 allowing the second part 74' to extend into the housing 14 to contact the surface 33 of the driven wheel 32.

However, in neither embodiment is the casing provided with an electrical connecting opening part from and right under which the outer electrical connecting portion of the sensor holder which has been inserted into the sensor holder receiving part is seen and which is positioned orthogonal to the insertion direction of the sensor holder, whereby an electrical connection for the sensor holder is made from the electrical connecting opening part. The sensor holder of Blanchet is totally enclosed within a housing 14 and cover 36 either by being received in the recess 54 (also called housing) of the first embodiment or the recess in the cover 36 in the second embodiment. There is no electrical connecting opening part from and right under which the outer electrical connecting portion of the sensor holder which has been inserted into the sensor holder receiving part is seen. When the sensor holder, that is the sensor body 74 or second part 74' is inserted into the combination housing 14 and cover 36, there is no part of the sensor body 74 or the second part 74' that can be observed from an electrical connecting opening part as all are contained completely within the housing 14 and cover 36.

The only part that can be seen of the connection plate is the pins 66 which are surrounded by a connector housing wall 70, a part of a plate 60 of the electrical connection module 12. The pins 66 and the connector housing wall 70 are inserted into a window 50 that is separated from the housing 14 by a connection part 40 and is found in an endplate 42. Thus, the casing or housing 54 is not provided with an electrical connecting opening part from and right under which the outer electrical connecting portion of the sensor holder which has been inserted into the sensor holder receiving part, formed in the casing, is seen and which is positioned orthogonal to the insertion direction of the sensor holder. Thus, Blanchet, counter to what is stated in the Office Action, does not disclose the basic structure of the invention. Hofmann, only applied for disclosing permanent magnets, also does not overcome the deficiencies of Blanchet with respect to the basic claim 1. Further, the combination does

not suggest the features of claims 2-6 and 11-15 which include all the features of claim 1 for the reasons claim 1 is not suggested as well as for the additional features recited therein.

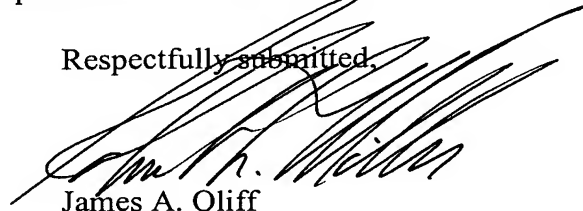
In paragraph 6, on page 4 of the Office Action, claims 7, 8 and 16-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Blanchet, Hofmann as applied to claim 6 above and further in view of Ohishi et al., U.S. Patent No. 6,091,171 (hereinafter "Ohishi"); and in paragraph 7, on page 5 of the Office Action, claims 9, 10, 19 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Blanchet, Hofmann and Ohishi as respectively applied to claims 7 and 8 above and further in view of JP 64-50647. The rejections are respectfully traversed.

As pointed out above, and at the interview, and as agreed at the interview, the basic combination of Blanchet and Hofmann does not suggest the invention of claim 1. The additional references do not overcome the deficiencies of Blanchet and Hofmann and thus cannot suggest the invention of claim 1 from which all claims depend. Further, the combination does not suggest the claimed invention not only for the reasons discussed with respect to claim 1 but for the additional features recited in the independent claims.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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Date: March 19, 2004

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